Title (en)
TIRE RFID TAG WITH SEGMENTED DIPOLE ANTENNA

Title (de)
REIFEN-RFID-TAG MIT SEGMENTIERTER DIPOLANTENNE

Title (fr)
ÉTIQUETTE RFID DE PNEU AVEC ANTENNE DIPÔLE SEGMENTÉE

Publication
EP 4280106 A1 20231122 (EN)

Application
EP 22173640 A 20220516

Priority
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Abstract (en)
Tuneable linear-antenna transponders and methods of making and using thereof are described herein. In some embodiments, the transponder includes two radiators formed of a conductive material, wherein the radiators may be identical or different. In some embodiments, the radiators are divided into a multitude of segments, wherein each segment is in the form of a linear segment or helical spring segment or cylindrical segment. In some embodiments, two of the consecutive segments are different in either shape and/or pitch of the helical spring. The distinct transmission line segments provide additional degrees of freedom, which enables finer/improved tunability of the antenna resonance.

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Citation (search report)
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